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- (iv) introducing a donor nucleus from the same species as the recipient cell into the recipient cell to produce the reconstructed chicken zygote or oocyte;
 - (v) activating the reconstructed zygote or oocyte; and
 - (vi) allowing the reconstructed zygote or oocyte to develop to term.
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- 2. The method of claim 1, in which the nuclear material of the recipient cell is visualized with near-infrared light using two photon laser scanning microscopy.
- 3. The method of claim 1, wherein the light has a wavelength from about 700 nm to about 1000 nm.
- 4. The method of claim 1, wherein the recipient cell is enucleated through the use of laser-mediated ablation.
- 5. The method of claim 1, wherein the visualization and enucleation are conducted using two photon laser scanning microscopy.
- 6. The method of claim 1, wherein the donor nucleus is genetically modified.

Please cancel claim 11.

Please amend claim 14 as follows:

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- 14. (amended twice) A method of producing a cloned chicken comprising the steps of:
 - (i) providing a recipient cell selected from the group consisting of chicken oocytes arrested at metaphase II and pronuclear zygotes;
 - (ii) visualizing the nuclear material of the recipient cell using light in the near-infrared region;
 - (iii) enucleating the recipient cell using light in the near infrared region;
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- (iv) introducing a donor nucleus from the same species as the recipient cell into the recipient cell to produce a reconstructed chicken zygote or oocyte;
 - (v) activating the reconstructed zygote or fertilizing the reconstructed oocyte;
 - (vi) transferring the reconstructed zygote or fertilized oocyte into an oviduct of a recipient female of the same species as the zygote or oocyte; and
 - (vii) allowing the reconstructed zygote or oocyte to develop to term.
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15. The method of claim 14, wherein the light has a wavelength from about 700 nm to about 1000 nm.

16. The method of claim 14, wherein the recipient cell nucleus is visualized using two photon laser scanning microscopy.

17. The method of claim 14, wherein the recipient cell is enucleated using two photon laser scanning microscopy.

18. The method of claim 14, wherein the visualization and enucleation are conducted using two photon laser scanning microscopy.

Please amend claim 19 as follows:

19. (amended twice) A method of producing a transgenic chicken comprising the steps of:

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- (i) providing a chicken recipient cell selected from the group consisting of chicken oocytes arrested at metaphase II and pronuclear zygotes;
 - (ii) visualizing the nuclear material of the recipient cell using light in the near-infrared region;
 - (iii) enucleating the recipient cell;

- (iv) introducing a transgenic chicken donor nucleus from the same species as the recipient cell into the recipient cell to produce a reconstructed chicken zygote or oocyte;
- (v) activating the reconstructed zygote or fertilizing the reconstructed oocyte;
- (vi) transferring the reconstructed zygote or fertilized oocyte into an oviduct of a recipient female of the same species as the zygote or oocyte; and
- (vii) allowing the reconstructed zygote or oocyte to develop to term.

Please amend claim 20 as follows:

20. (amended) The method of claim 19, wherein the transgene codes for a protein selected from the group consisting of human growth hormone, interferon, β -casein, α -1 antitrypsin, antithrombin III, collagen, factor VIII, factor IX, factor X, fibrinogen, hyaluronic acid, insulin, lactoferrin, protein C, erythropoietin (EPO), granulocyte colony-stimulating factor (G-CSF), granulocyte macrophage colony-stimulating factor (GM-CSF), tissue-type plasminogen activator (tPA), feed additive enzymes, somatotropin, chymotrypsin, monoclonal antibodies, and polyclonal antibodies.

Please amend claim 21 as follows:

21. (amended twice) A method of producing a protein, comprising:

- (i) producing a transgenic chicken according to the method of claim 19 wherein the transgene encodes an exogenous protein, said protein being deposited into the developing eggs of said chicken;
- (ii) harvesting hard shell eggs of said chicken; and
- (iii) isolating the exogenous protein from said eggs.

22. The method of claim 21 wherein the exogenous protein is selected from the group consisting of human growth hormone, interferon, β -casein, α -1 antitrypsin, antithrombin III, collagen, factor VIII, factor IX, factor X, fibrinogen, hyaluronic acid, insulin, lactoferrin, protein C, erythropoietin (EPO), granulocyte colony-stimulating factor (G-

CSF), granulocyte macrophage colony-stimulating factor (GM-CSF), tissue-type plasminogen activator (tPA), feed additive enzymes, somatotropin and chymotrypsin.

Please amend claim 24 as follows:

24. (amended) A method of claim 14 wherein the cloned chicken is a knock-out or knock-in chicken.

Please amend claim 25 as follows:

B4 25. (amended) An intact hard shell egg produced by the method of claim 21 containing exogenous protein.

Please amend claim 26 as follows:

26. (amended) A reconstructed chicken embryo comprising a nucleus from a first donor cell in the cytoplasm of a second suitable recipient cell.

Please cancel claim 27.

Please amend claim 28 as follows:

28. (amended) A method of producing a cloned chicken comprising:

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- (i) producing a reconstructed zygote by the method of claim 1;
 - (ii) transferring the reconstructed zygote into an oviduct of a recipient female of the same species as the zygote; and
 - (iii) allowing the reconstructed zygote to develop to term.

Please cancel claim 29.

Please amend claim 30 as follows:

30. (amended) A method of producing a cloned chicken comprising:

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- (i) producing a reconstructed oocyte by the method of claim 1;